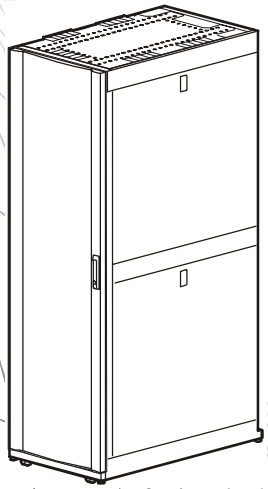
www.apc.com

Unpacking, Installation, and Customization

NetShelter® SX Enclosure



Patent Pending

This manual is available in English on the enclosed CD.

Dieses Handbuch ist in Deutsch auf der beiliegenden CD-ROM verfügbar.

Este manual está disponible en español en el CD-ROM adjunto.

Ce manuel est disponible en français sur le CD-ROM ci-inclus.

Questo manuale è disponibile in italiano nel CD-ROM allegato.

本マニュアルの日本語版は同梱の CD-ROM からご覧になれます。

Instrukcja Obsługi w jezyku polskim jest dostepna na CD.

O manual em Português está disponível no CD-ROM em anexo.

Данное руководство на русском языке имеется на прилагаемом компакт-диске.

Bu kullanım kılavuzunun Türkçe'si, ilişikte gönderilen CD içerisinde mevcuttur.

您可以从包含的 CD 上获得本手册的中文版本。

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Product Overview

Description

The American Power Conversion (APC®) NetShelter® SX 600-mm and 750-mm wide enclosures are high-quality enclosures for storage of industry-standard (EIA-310), 19-inch rack-mount hardware, which includes servers, voice, data, networking, internetworking, and APC power protection equipment. The 750-mm wide enclosure has vertical mounting flanges that can be adjusted to accommodate telecommunications equipment.

Unless stated otherwise, the information in this manual pertains to both the 600-mm and 750-mm wide enclosures.

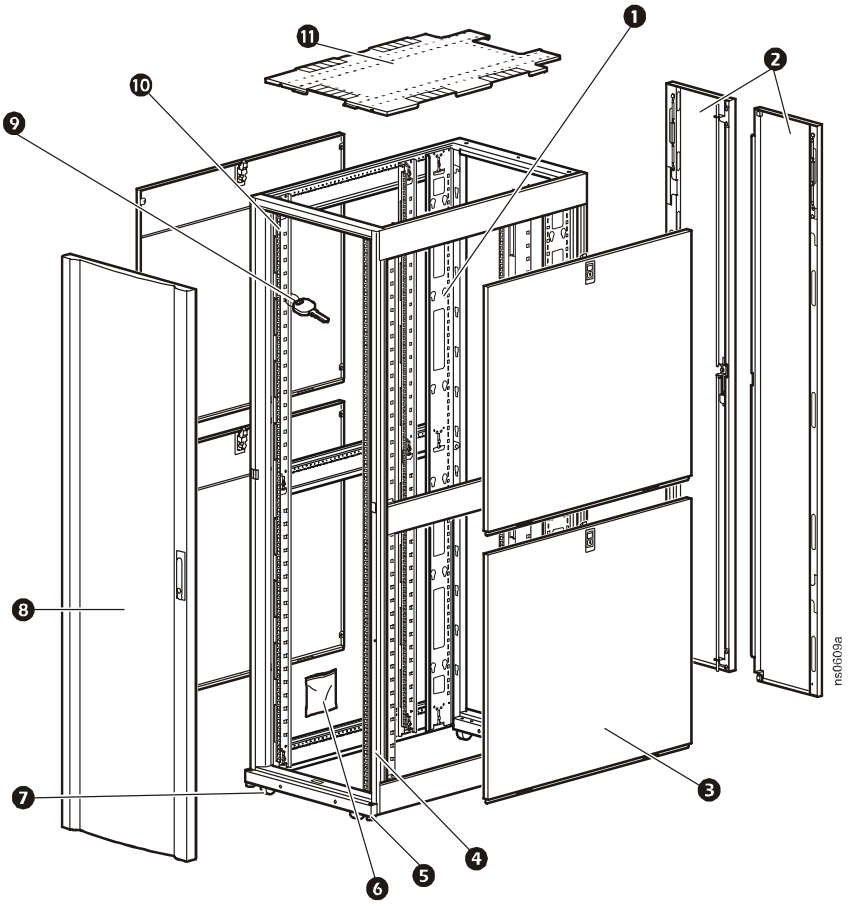
NetShelter SX Enclosures

Model	Rack Mounting Height	Rack Mounting Width	External Enclosure Width	Description
AR3100	42 U†	19 in (482 mm)	23.62 in (600 mm)	Enclosure with sides
AR3107	48 U	19 in (482 mm)	23.62 in (600 mm)	Enclosure with sides
AR3150	42 U	19 in (482 mm)	29.53 in (750 mm)	Enclosure with sides
AR3157	48 U	19 in (482 mm)	29.53 in (750 mm)	Enclosure with sides

†One U=1.75 in (44.45 mm). See “Identifying one U-space on the vertical mounting flange” on page 22.

Product Inventory

Components of the enclosure



1. Vertical cable organizer
2. Split doors
3. Side panels with locks
4. Frame posts
5. Adjustable leveling feet
6. Hardware bag
7. Casters
8. Reversible curved door
9. Key
10. Vertical mounting flanges
11. Roof

Before Installation

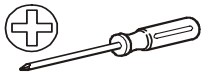
Tools

Tools (provided)

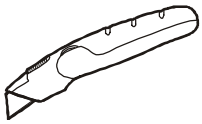
Torx® T30/#2 Phillips wrench (1)

Cage nut tool (1)

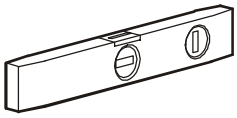
Other tools required (not provided)



Phillips screwdriver (1)

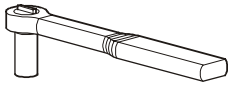


Utility knife (1)



Level (1)

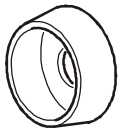
13-mm open-ended wrench (1)



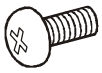
10-mm socket wrench (1)

Hardware

Hardware (provided)



Plastic cup washers (60)



M6 x 16 Phillips slot screws (60)

M5 x 12 screws (4)

Cage nuts (60)

7-mm hole plugs (4)

Unpacking

How to unpack the enclosure

Use at least two people to unpack the enclosure.

To prevent the enclosure from tipping over after installation:

- **Stabilize the enclosure before installing the components. See “Rack stabilization options” on page 9.**
- **Do not extend components on sliding rails out from the enclosure until you have installed three or more pieces of similar equipment, or the stabilizer plate or bolt-down brackets are installed. See “Rack stabilization options” on page 9.**
- **Do not extend more than one component from the enclosure at a time.**
- **Load the heaviest components first, and place them toward the bottom of the enclosure to prevent the enclosure from becoming top-heavy.**
- **Use caution when moving an empty enclosure on its casters; the enclosure may be unstable when pushed or pulled from the side. Push the enclosure from the front or back when moving it on its casters. For extra stability, load 350 lbs (158 kg) of equipment into the bottom of the enclosure before moving it on its casters.**

1. Move the shipping pallet to a firm, level surface in an open area. Inspect the enclosure for visible signs of shipping damage. If you detect shipping damage, contact APC Customer Support at the number listed on the yellow label on the front of the enclosure or on the back cover of this manual.
2. Refer to the label on the packaging to determine where to cut the wrapping. Using sturdy shears or a utility knife, carefully remove the plastic stretch wrap surrounding the enclosure.

Save the bag containing the warranty card and installation manual.

3. Remove the four cardboard corner protectors.
4. Remove the two pallet-mounting brackets that anchor the enclosure to the shipping pallet, using a 13-mm wrench (not provided).

Save the pallet-mounting brackets if you wish to bolt the enclosure to the floor. See “Rack stabilization options” on page 9.

5. With one person on each side of the enclosure, carefully roll it toward the rear of the pallet until the rear casters clear the back edge of the pallet. Continue to slide the enclosure rearward until the rear casters touch the floor.
6. While one person carefully tips the enclosure slightly away from the pallet, have the other person pull the pallet away from the enclosure. Set it gently on its casters.

Save the pallet if you plan to reship the enclosure.

7. Use the 7-mm hole plugs (provided) to cover the holes used to attach the pallet-mounting bracket to the frame.

Please recycle

The shipping materials are recyclable. Save them for later use, or dispose of them appropriately.

Disclaimer

APC is not responsible for damage sustained during reshipment of this product.

Verify the inventory

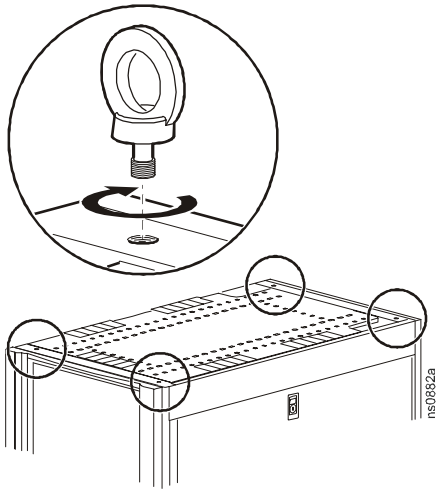
After unpacking the enclosure, verify that all required components and hardware have been shipped with the enclosure. See “Product Inventory” on page 2 for a list of components.

If any items are missing, contact APC Customer Support at a number on the back cover of this manual, or at the APC Web site, **www.apc.com**.

Moving the enclosure

Casters. The enclosure can be moved on its casters with up to 2,250 lbs (1 021 kg) of equipment installed. Push the enclosure from the front or the back, not the sides; it may be unstable when pushed from the side. For greater stability, load 350 lbs (159 kg) or more of equipment into the enclosure before moving it on its casters.

Eye bolts. If lifting of the enclosure is necessary, this can be done by attaching eye bolts (not included) to the top of the enclosure frame. Use appropriately rated M10 eye bolts with a shoulder for angular lifting. The maximum weight of installed equipment should be 312 lbs (142 kg) per eye bolt (1250 lbs [567 kg] total).



Configuration

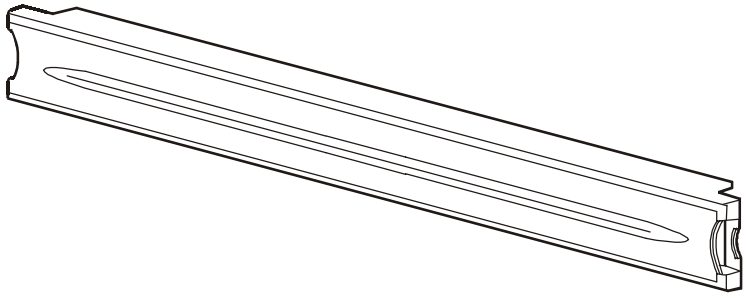
Before installing the enclosure, plan the location and space needed to install equipment, and plan the ergonomics of keyboards and video monitors.

The Rack Configurator, available on the APC Web site, **www.apc.com**, helps you plan your configuration to maximize the available U-space of your enclosures.

Caution

Improper airflow could damage installed components.

To maintain proper airflow, cover any empty vertical enclosure space with blanking panels (not included). APC offers modular, plastic blanking panels that snap into place without tools (AR8136BLK).



Installation

How to Install the Enclosure

Warning

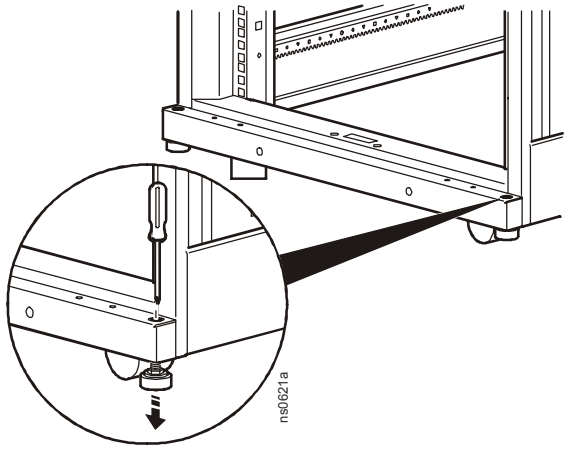
For extra stability, load 350 lbs (158 kg) of equipment into the bottom of the enclosure before moving it on its casters.

Leveling the enclosure

Level the enclosure before installing equipment.

The leveling feet at the corners provide a stable base if the floor is uneven, but they cannot compensate for a badly sloped surface. You can remove the casters and leveling feet of the 600-mm enclosure to allow the base of the enclosure to rest directly on the floor.

1. Move the enclosure to a level location.
2. For each leveling foot, insert a Phillips or slotted screwdriver into the screw above the leveling foot. Turn the screw clockwise to extend the leveling foot until it makes firm contact with the floor.



Note

If the enclosure needs to be leveled after equipment has been installed, use a 13-mm open-ended wrench (not provided) to lower the leveling feet. For each leveling foot, fit the 13-mm end of the open-ended wrench (not provided) to the hex head just above the round pad on the bottom of the foot. Turn the wrench clockwise to extend the leveling foot until it makes firm contact with the floor.

Removing the casters and leveling feet (optional)

Warning

To avoid personal injury or damage to the enclosure, two people should support the enclosure.

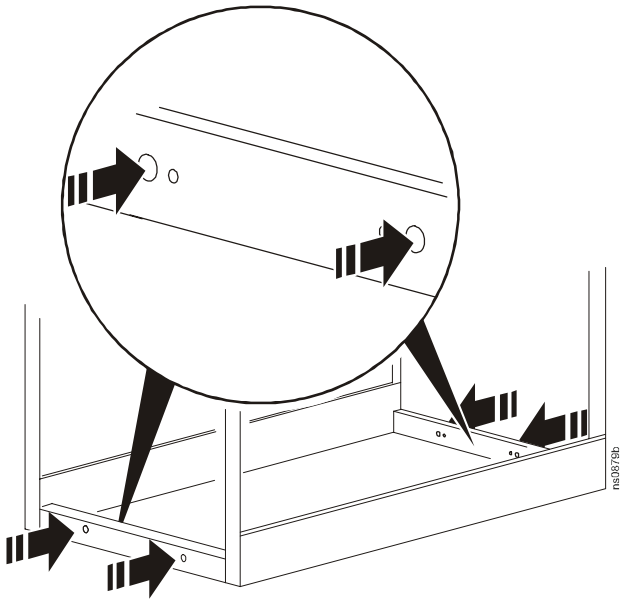
1. Lay the enclosure on its side.
2. Using a 10-mm socket wrench (not provided), remove the four hex nuts from each of the casters and remove the casters.
3. For each leveling foot, use a Phillips screwdriver to turn the foot clockwise until it is released from the frame.

Rack stabilization options

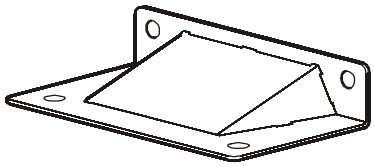
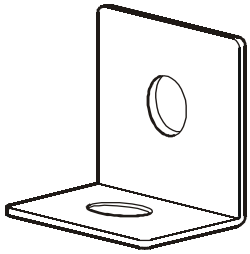
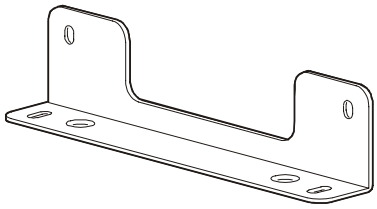
Warning

The enclosure cannot be stabilized using the bolt-down bracket or stabilization plate if the casters or leveling feet are removed.

Brackets can be used to bolt the enclosure to the floor internally or externally for additional stabilization. With the appropriate anchoring hardware (not provided), this system meets UBC Zone 4 requirements. See the APC Web site, www.apc.com, for complete UBC compliance requirements and bracket installation instructions. All brackets can be fastened to the enclosure through the holes shown in the following illustration.



APC offers the following brackets for providing stabilization.

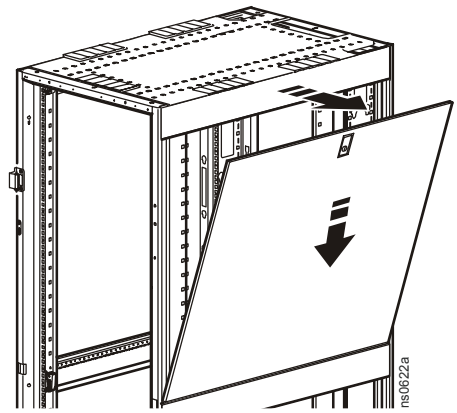
Product	SKU	Description	Figure
Stabilizer Plate Kit	AR7700	Attaches externally to the rack and floor to provide additional stability.	
Bolt-down Kit	AR7701	Attaches to rack and floor internally or externally to provide additional stability without blocking cable access.	
Pallet Mounting Bracket (provided)		Attaches to rack and floor internally or externally to provide additional stability.	

Removing and Installing the Side Panels

Remove the side panels to access the interior or pass cables between the enclosures when joining enclosures together. Side panels offer additional security and assist with proper airflow within the enclosure.

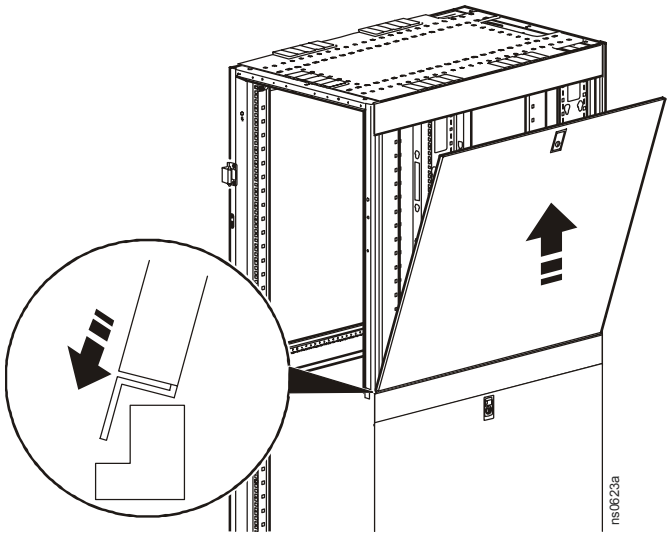
Removing the side panels

1. Use the key to unlock the panel, if necessary.
2. Slide the panel latch down and pull the top of the panel away from the enclosure.
3. Release the latch and lift the panel up and off the side brace lip at the bottom of the panel frame.



Reinstalling the side panels

1. Engage the bottom of the panel securely with the side brace lip before pushing the top of the panel forward into place.
2. Slide the panel latch up.



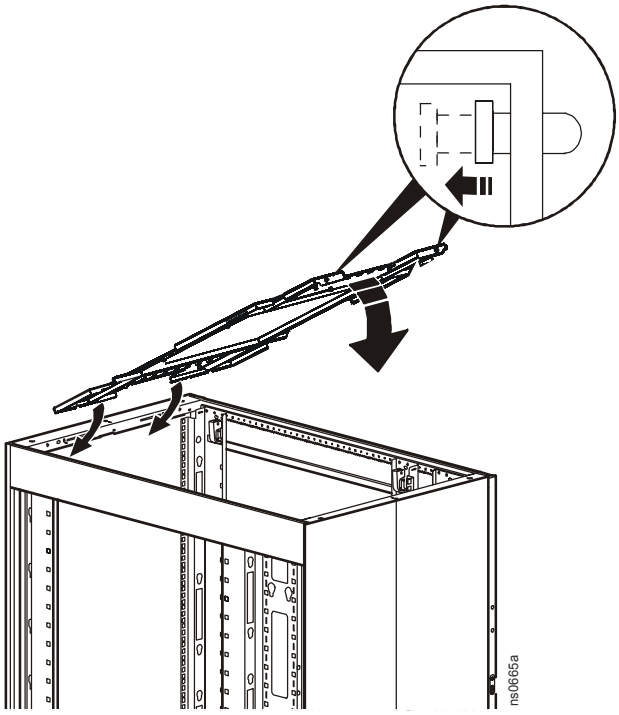
Removing and Installing the Roof

Removing the roof

1. Pull and hold the two spring pins in the rear of the enclosure.
2. Push the roof up from the enclosure.
3. Lift the roof off the enclosure.

Installing the roof

1. Slide the tabs on the front of the roof into the slots in the front of the enclosure.
2. Lower the roof into the enclosure, while pulling the two spring pins in the rear of the roof.
3. Release the pins to secure the roof to the enclosure.



Warning

To avoid damage or injury, do not use the roof as a walkway.

Note

The roof can be removed and reinstalled even if cables are routed through the top of the enclosure.

Removing and Installing the Doors

Note

If the enclosures are joined together, see “Removing the Doors of Joined Enclosures” on page 31.

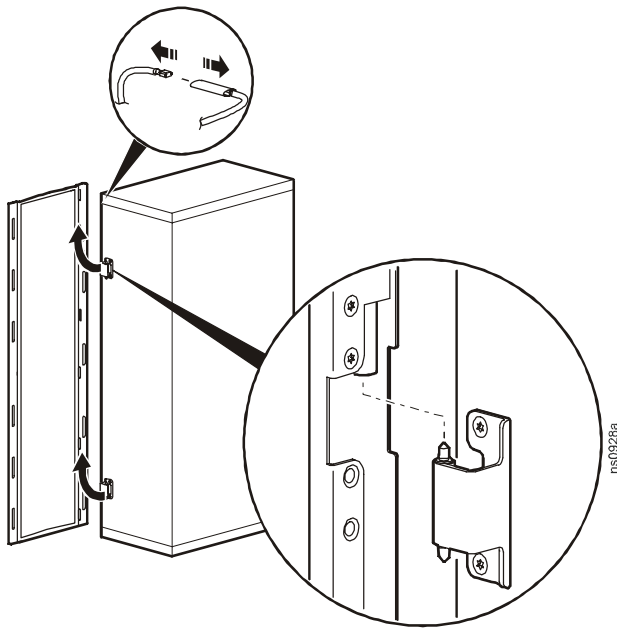
Warning

To avoid personal injury or damage to the enclosure, one person should support the door while another person removes the door from its frame.

Removing the doors

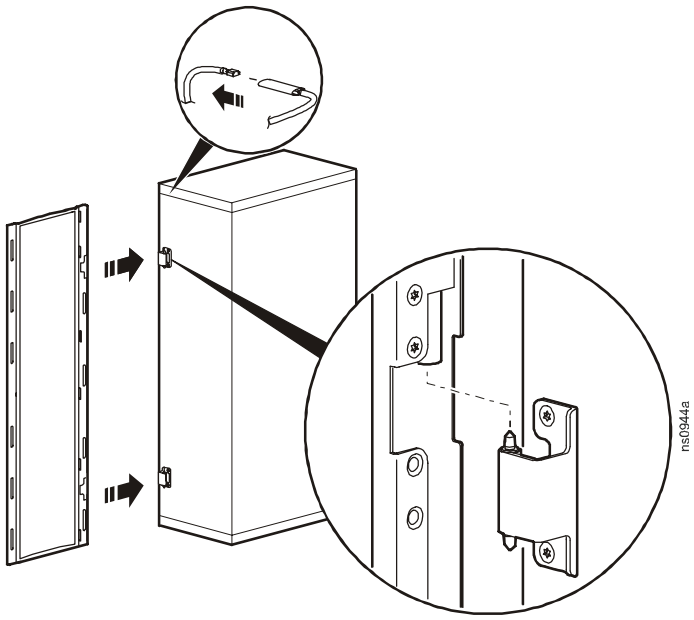
You can remove the front and rear doors of the enclosure to gain better access to equipment.

1. Disconnect the grounding wire.
2. Open the door to approximately 90 degrees and lift it up and off the hinges.



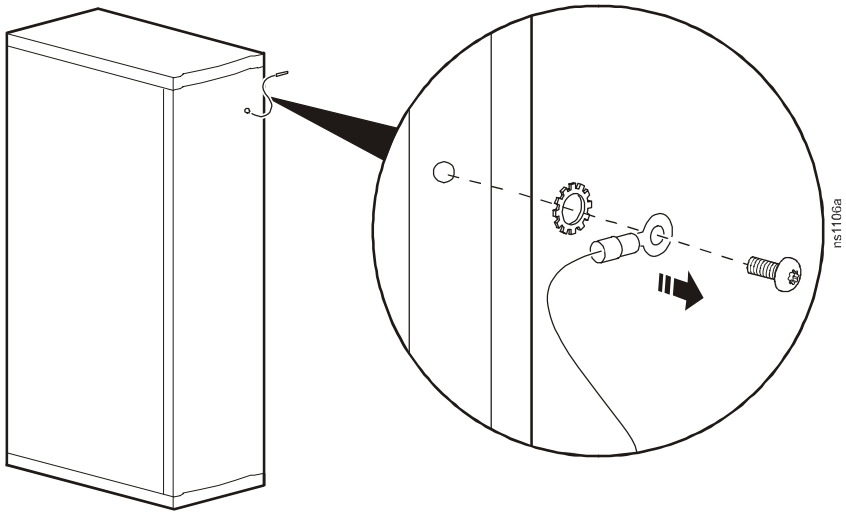
Installing the doors

1. Hold the door approximately 90 degrees to the frame of the enclosure. Align the door hinges with the hinge pins on the frame.
2. Lower the door onto the hinge pins, making sure the pins engage with the hinge barrels on the door.
3. Reconnect the grounding wire.
4. Make sure that the door opens and closes properly.

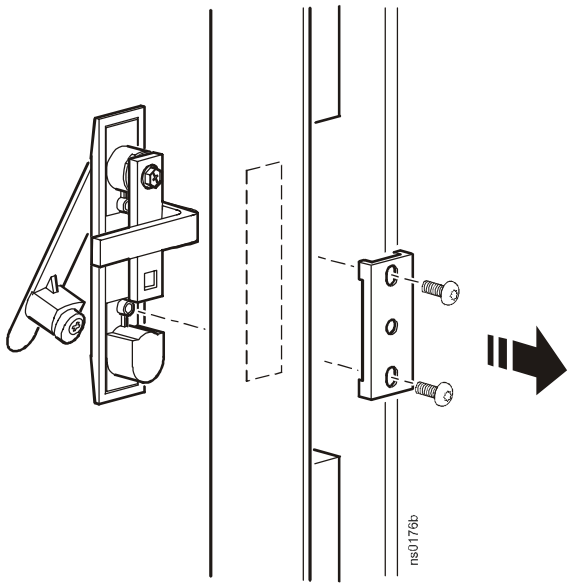


Reversing the front door

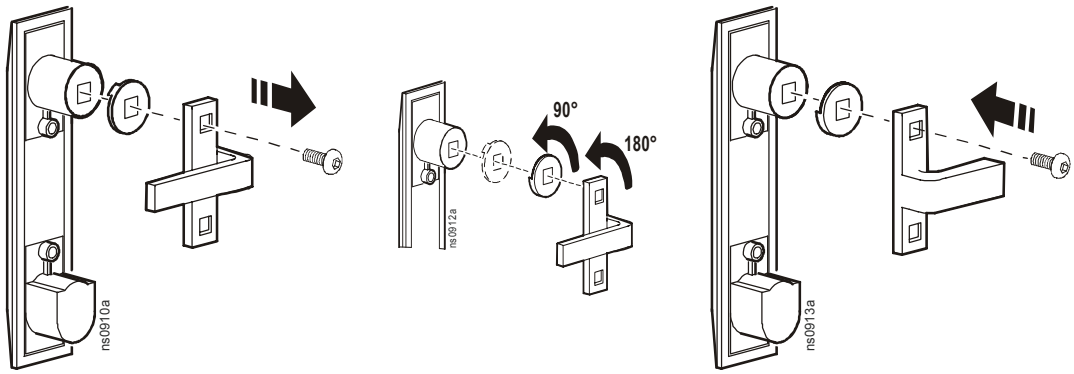
1. Remove the M6 × 12 pan-head screws and star washers that secure the grounding wire to the frame and door, using the Torx T30/Phillips #2 wrench (provided).



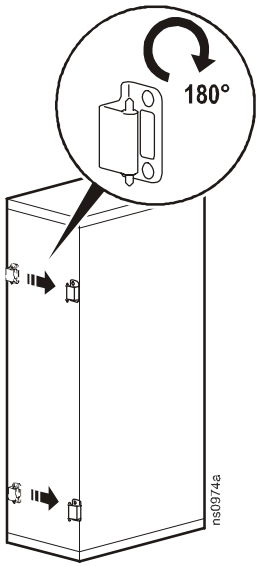
2. Remove the two Phillips screws from the rear of the door handle assembly, and remove the handle assembly from the door.



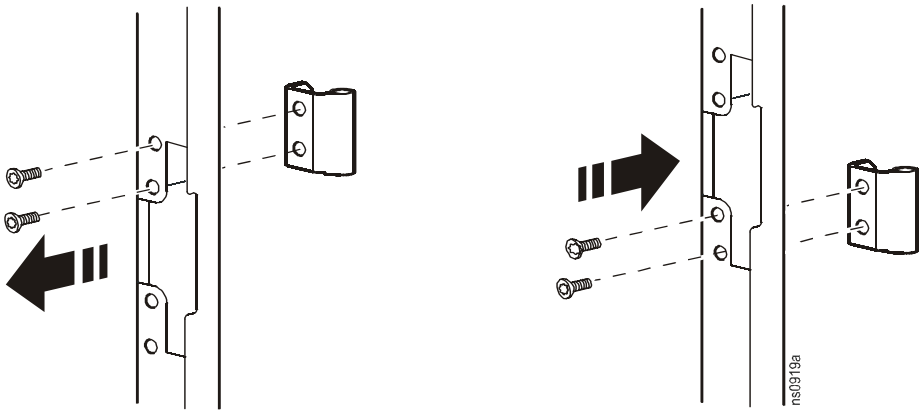
3. Remove the screw, latch, and washer from the back of the door handle assembly using the Torx T30/Phillips #2 wrench (provided). Rotate the washer 90 degrees and the latch 180 degrees and reattach the latch.



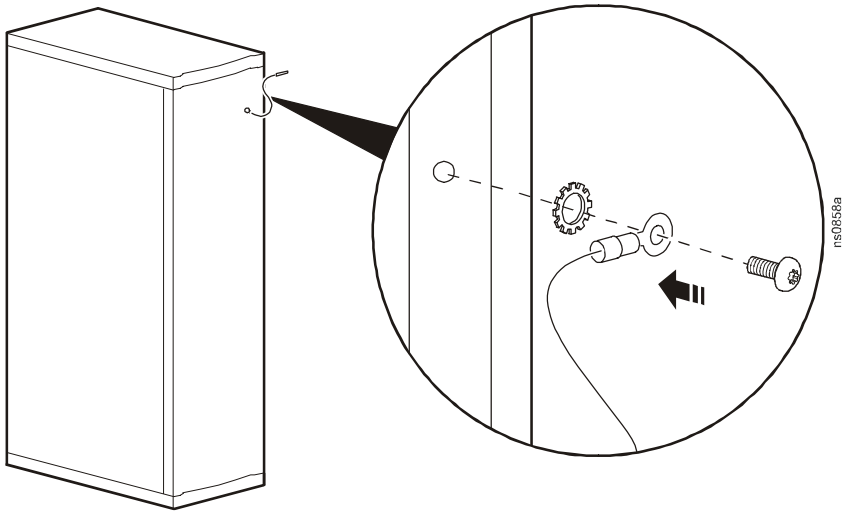
4. Remove the door. See “Removing the doors” on page 13.
5. Remove the hinges from the frame using the Torx T30/Phillips #2 wrench (provided). Rotate the hinges 180 degrees, and reinstall them on the other side of the frame of the enclosure.



6. Remove the hinges from the door and reinstall them using the set of holes directly below where they were originally installed.



7. Rotate the door 180 degrees and reinstall the door. See “Installing the doors” on page 14.
8. Reinstall the grounding wire at the top of the door, near the hinges, and to the enclosure frame using the M6 × 12 pan-head screw and star washer.

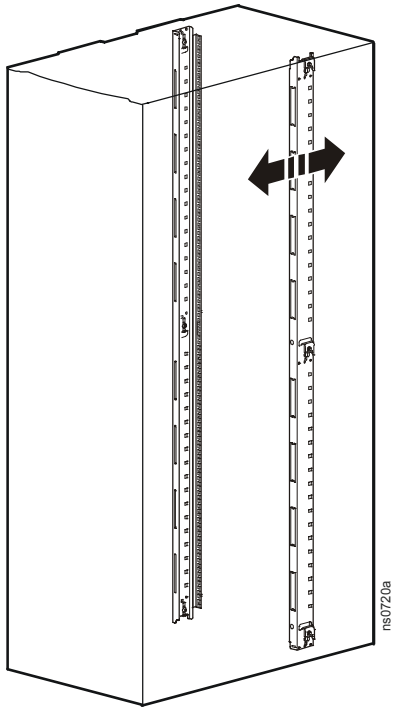


9. Rotate the door handle assembly 180 degrees and reinstall it using the screws removed in step 2.

Vertical Mounting Flanges

Vertical mounting flanges come factory-installed on the enclosure in the proper position for use with rack-mountable equipment that has a depth of 29 in (737 mm). The mounting flanges are adjustable towards the front or the rear of the enclosure to accommodate different rails or equipment with other depths. The flanges on a 600-mm enclosure can be adjusted to be as close as 7.50 in (191 mm) or as far as 36.80 in (935 mm) apart.

The flanges on a 750-mm enclosure can be adjusted to be as close as 11.50 in (292.10 mm) in or as far as 31 in (787.40 mm) apart. A common application for the 750-mm enclosure is to move the flanges to a depth of 18.75 in (476 mm) to accommodate networking and telecommunications equipment.

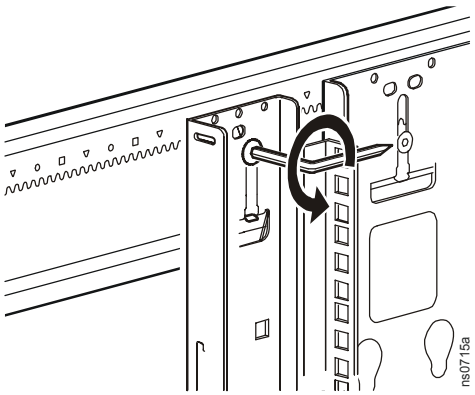


Adjusting the vertical mounting flanges on the side braces

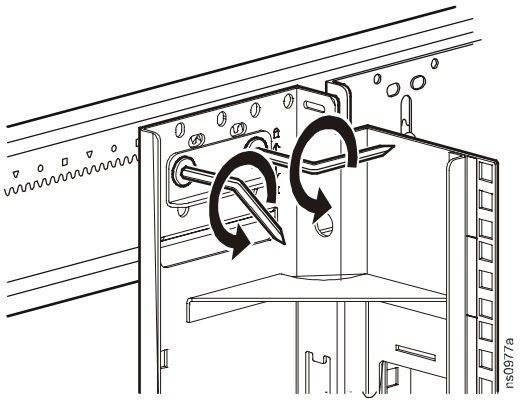
Warning

To avoid personal injury or damage to the enclosure, perform this procedure without any equipment installed on the mounting flanges.

1. Use the Torx T30/Phillips #2 wrench (provided) to loosen—but not remove—the Torx screws in the slots of each mounting flange.

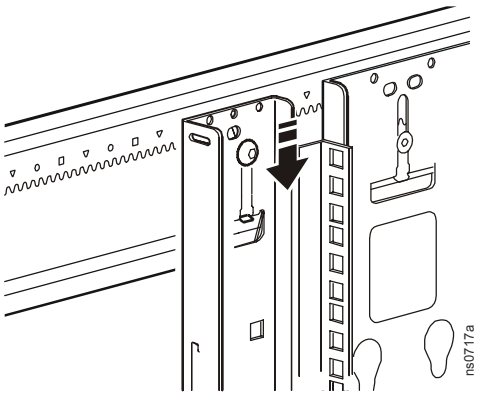


600-mm enclosure



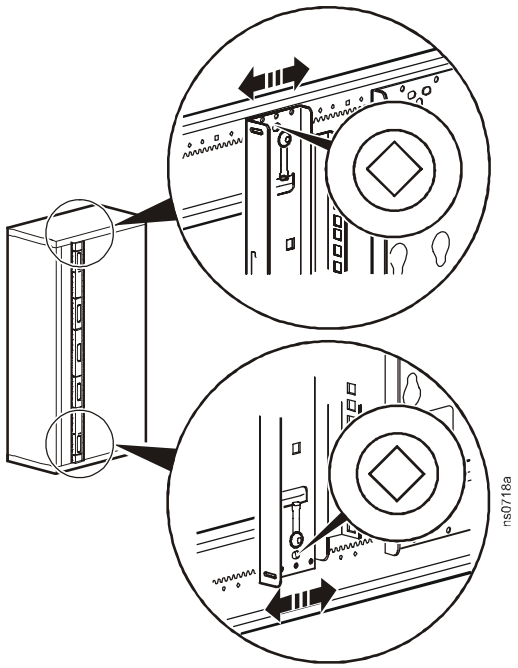
750-mm enclosure

2. Lower the flat bracket and move the mounting flange to the desired location.



3. To align the vertical mounting flanges properly, note the symbol (for example, the diamond) visible through the one of the holes on the top of the flange, and ensure that the same symbol is visible through the corresponding hole at the bottom of the flange. Only one symbol is visible at a time through any of the holes. In the factory-standard position, the circles are visible through two of the holes.

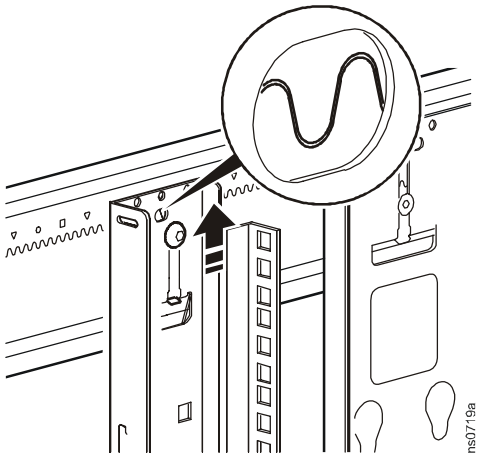
   On the 750-mm rack there are circles 18.75 in (476 mm) behind the front mounting flange designating the location for networking and telecommunications equipment.



Note Vertical mounting flanges adjust in 1/4-in (6-mm) increments.

Note Vertical mounting flanges placed across from each other must have the same visible symbol.

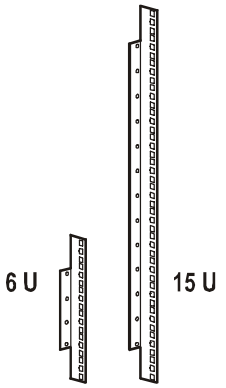
4. When the vertical mounting flange is in the proper location, slide each screw up until the teeth in the bracket engage fully with the teeth in the side brace, and tighten the screws.



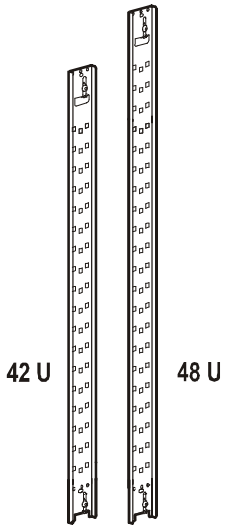
Installation accessories

To install equipment that has a different mounting depth from the other equipment in the enclosure, use the appropriate APC Recessed Rail Kit.

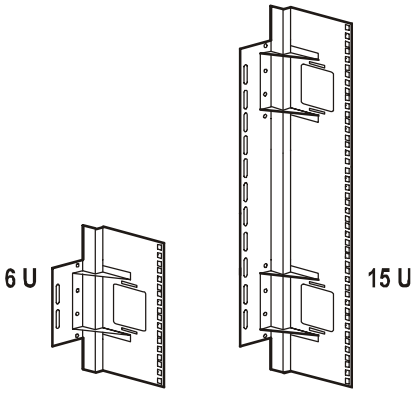
Product	SKU
42 U for 600-mm enclosure	AR7503
48 U for 600-mm enclosure	AR7504
42 U for 750-mm enclosure	AR7508
48 U for 750-mm enclosure	AR7578



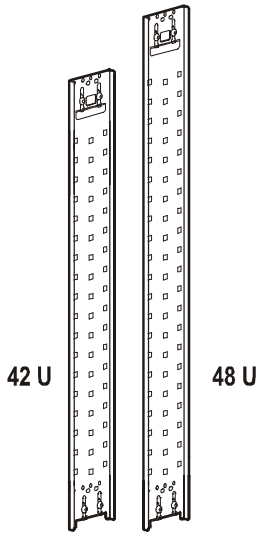
600-mm vertical mounting rail



600-mm vertical mounting flange



750-mm vertical mounting rail



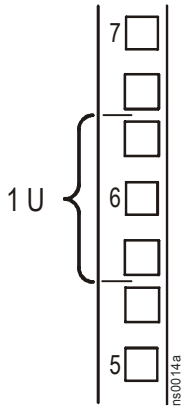
750-mm vertical mounting flange

Installing Equipment

This section provides information on how to install rack-mount equipment in the NetShelter SX enclosure. The instructions provided with the equipment provide more detailed information.

Identifying one U-space on the vertical mounting flange

When installing equipment, locate the top and bottom of a U-space on the mounting flanges. Every third hole on the mounting flanges of a NetShelter enclosure is numbered to indicate the middle of a U-space. A U-space consists of one of these numbered holes and one hole directly above and below it, as shown.



Installing cage nuts

APC offers a cage nut hardware kit (AR8100) for use with square holes.

Warning

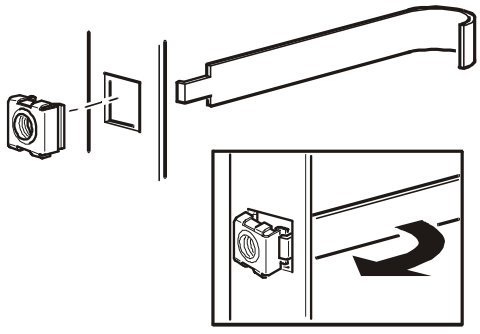
Install cage nuts horizontally, with the ears engaging the sides of the square hole. Do NOT install cage nuts vertically with the ears engaging the top and bottom of the square hole.

1. Insert the cage nut into the square hole by hooking one ear of the cage nut assembly through the far side of the hole.

Note

Install the cage nuts on the interior of the vertical mounting flange.

2. Place the cage nut tool (provided) on the other side of the cage nut and pull to snap it into position.



Removing cage nuts

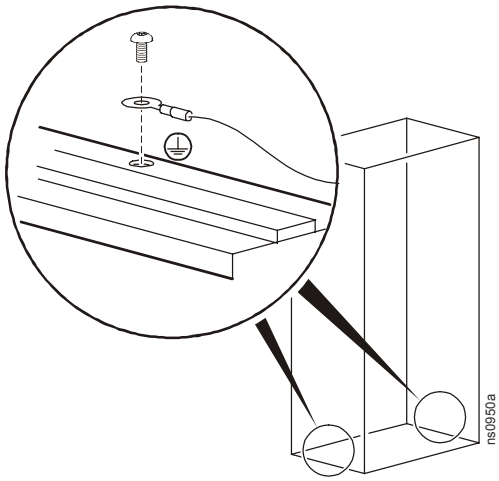
1. Remove any attached screw.
2. Grasp the cage nut and squeeze the sides to release it from the square hole.

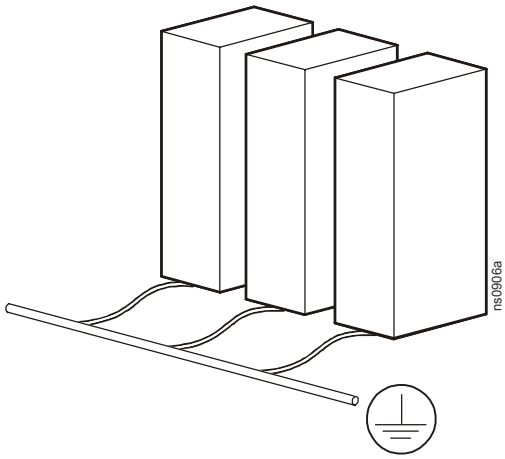
Grounding

The doors, side panels, and roof of the enclosure are grounded to the enclosure frame. The doors are grounded with quick-disconnect cables. The roof and side panels are inherently grounded through spring fingers.

Each enclosure should be grounded directly to the building ground using one of the grounding nuts at the base of the enclosure.

Ground each enclosure directly to the building ground. Do not ground one enclosure to another enclosure in a cascading style.

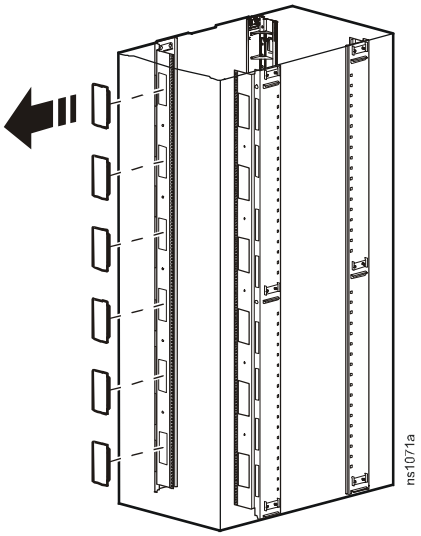




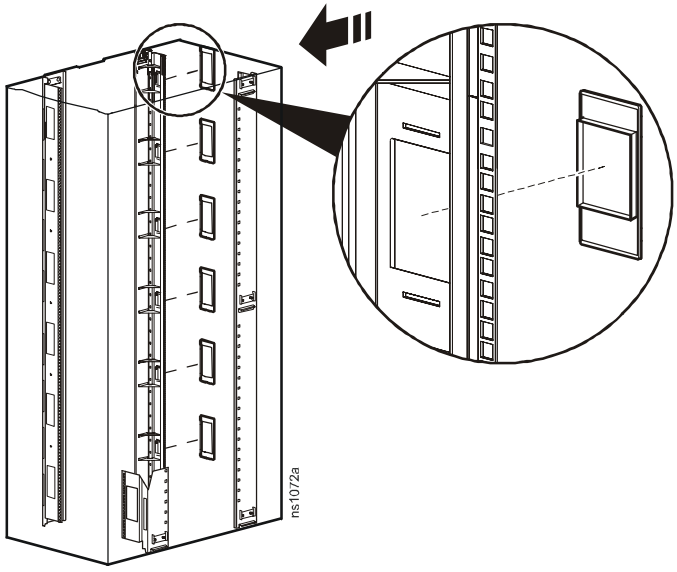
Equipment with side airflow requirements

For enclosures storing equipment that requires side airflow, the vertical mounting flange factory-installed cable cutout covers need to be removed and repositioned to the rear of the enclosure.

1. Determine which side of the enclosure is the air intake side for the equipment.
2. Remove the cable cutout covers from the front vertical mounting flange of the air intake side of the enclosure.



3. Reinstall the covers in the cable cutout holes on the rear vertical mounting flange of the air intake side of the enclosure.



Cable Management

The NetShelter SX enclosure has multiple cable access openings in the enclosure, including the roof, sides, and bottom. Two vertical cable organizers are included with the enclosure, and APC offers a variety of other cable management accessories.

Vertical cable organizers

The vertical cable organizers (two included) attach to the enclosure anywhere along the side braces and provide toolless mounting capabilities for APC Rack Power Distribution Units, APC cable containment brackets, and tie-off locations for cables. The standard position for the vertical cable organizers is in the rear of the enclosure, but they can be mounted anywhere along the side braces in a similar manner as the mounting flanges.

Removing or relocating vertical cable organizers.

Vertical cable organizers can be relocated within the enclosure or removed completely.

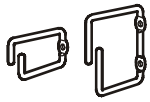
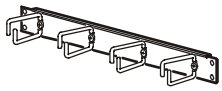
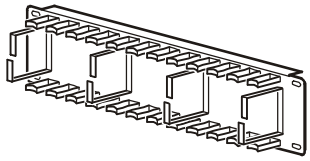
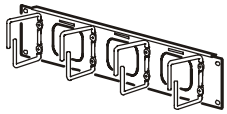
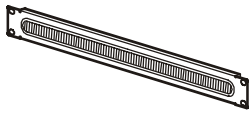
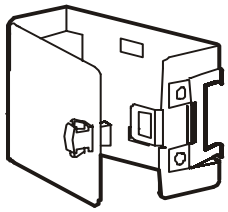
1. Loosen the screws that attach the vertical cable organizer to the enclosure.
2. Move the vertical cable organizer to the desired location or lift it up and pull it toward the inside of the enclosure.
3. Align the vertical cable organizers properly. The vertical cable organizers align in the same way as the vertical mounting flanges. See “Adjusting the vertical mounting flanges on the side braces” on page 19.

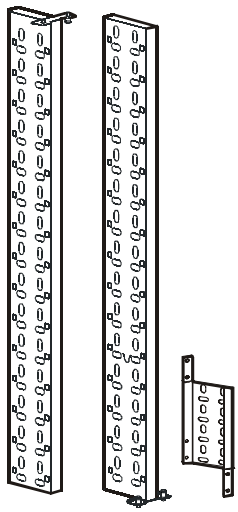
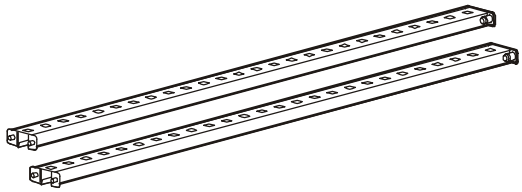
Additional vertical cable organizers can be ordered from APC (AR7502 for the 42 U enclosure or AR7572 for the 48 U enclosure).

The 750-mm wide enclosure features openings in the front vertical mounting flanges for cable access. These openings are sealed with plastic covers to restrict airflow, but can be removed to access cables. If the covers are removed, APC offers a Brush Strip Kit (AR7706) which allows for cable access, but promotes proper airflow.

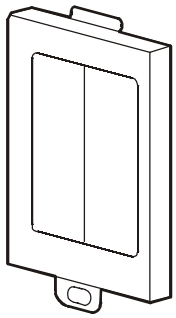
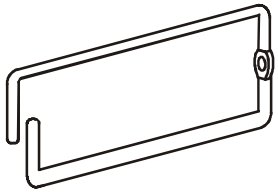
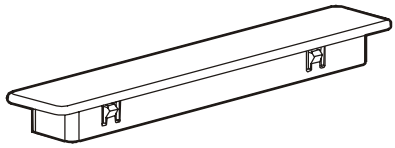
If the vertical mounting flanges of the 750-mm wide enclosure are moved toward the back of the enclosure, APC offers a NetShelter SX Air Recirculation Prevention Kit (AR7708) with additional plastic covers and foam strips to seal openings.

Cable management options for 600-mm and 750-mm enclosures

Product	SKU	Description	Figure
Cable management rings	AR8113A	Fastens cables to posts, mounting rails, or braces.	
19-inch horizontal cable organizer	AR8425A (1U) AR8426A (2U)	Routes cables horizontally on the front or back of the 19-inch EIA rack.	
19-inch 2-U patch cord organizer	AR8427A	Routes cables horizontally on the front or back of the 19-inch EIA rack.	
19-inch 2-U horizontal cable organizer pass-through	AR8428	Routes cables horizontally or front-to-rear.	
19-inch 1-U cable pass-thru with brush strip	AR8429	Assists with containing air in the enclosure.	
Cable containment brackets	AR7702	Contains cables along the vertical cable organizer and is installed without tools.	
Side channel cable trough	AR8008BLK	Routes cables from the front to the rear of the enclosure.	

Product	SKU	Description	Figure
Cable tree	AR7505	Routes cables or attaches PDUs vertically in the rear of the enclosure. Consists of three pieces, including a smaller piece that allows it to be installed in a 48-U enclosure.	
Roof bridge	AR7209	Replaces the standard roof to allow increased cabling access while still supporting ISX troughs and partitions. Consists of two pieces of equal size.	
Vertical Cable Organizer for NetShelter 0-U Channel	AR8442	Eliminates cable stress by organizing cable layout within the rear channels of the enclosure. Takes up zero U of space within the enclosure. Consists of two pieces of equal size that, when connected, span the height of a 42-U enclosure. Can be used in any APC enclosure.	

Cable accessories for 750-mm enclosures

Product	SKU	Description	Figure
Brush strip kit	AR7706	Closes openings in mounting flanges to allow cable access, but maintains proper airflow.	
1-U cable ring	AR7707	Fastens cables to posts, for use with 750-mm enclosure networking applications.	
NetShelter SX air recirculation prevention kit	AR7708	Maintains proper airflow if the front vertical mounting flanges are moved to the rear of the enclosure.	

Joining Enclosures

How to Join Enclosures

You can expand your installation by joining two enclosures together. Enclosures without sides include pre-installed joining hardware. Enclosures with sides do not include joining hardware.

To connect a NetShelter SX enclosure to a NetShelter VX or NetShelter VS enclosure, APC offers a separate joining kit (AR7601 for enclosures with 600-mm centers or AR7602 for enclosures with 24-in centers). When using the AR7601, the NetShelter SX enclosure will be inset by 1.3 in (33.2 mm) from the VX or VS enclosure.

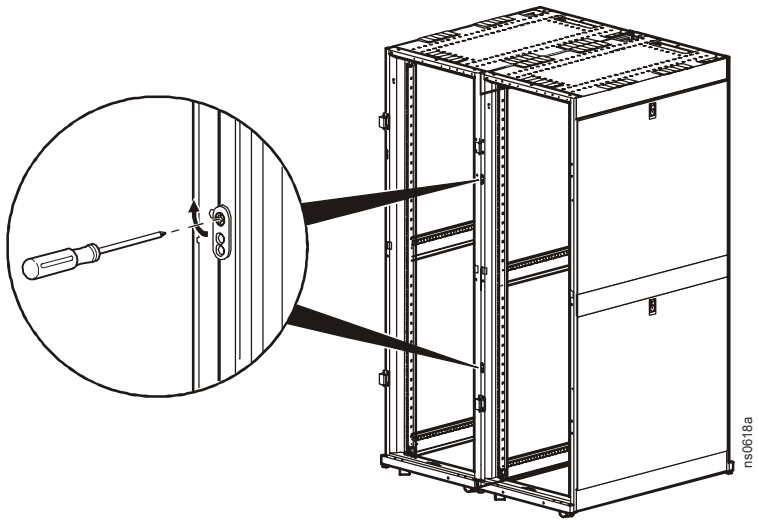
Caution Joining enclosures together does not provide additional stability to the enclosures.

Note NetShelter SX enclosures can be joined with or without side panels installed.

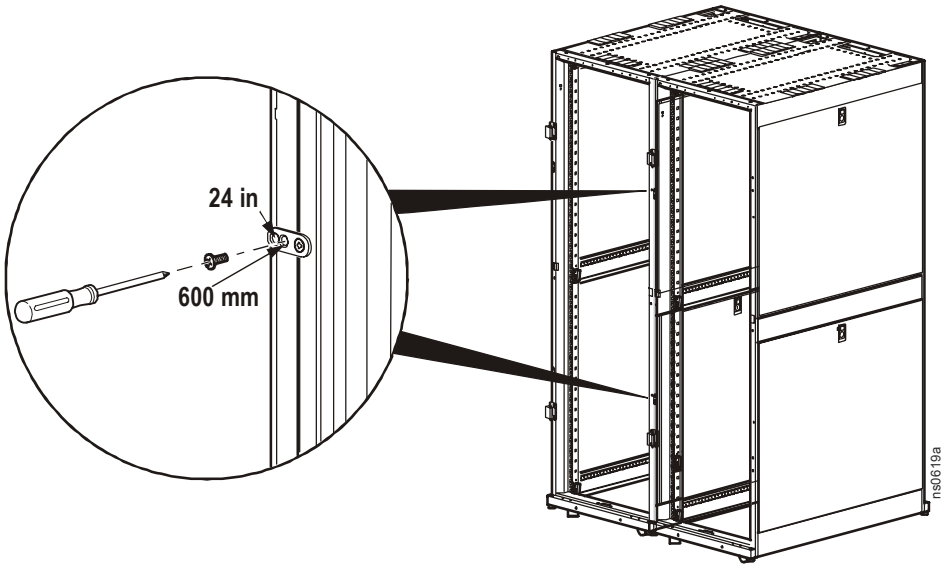
1. Remove the front doors from the enclosures if necessary.

   See “Removing the doors” on page 13.

2. Locate the four joining brackets on the enclosure—two brackets on the front and two brackets on the rear. Rotate each bracket ninety degrees toward the adjoining enclosure, so that the bracket is parallel to the floor.



3. The 600-mm enclosures can be joined so that their centers are 24 in or 600 mm apart. Align the enclosures to use the appropriate holes on the front and rear of the enclosure for the spacing you need and secure the enclosures using one M5 × 12 flat-head screw per bracket.



4. If 600-mm enclosures are joined together on 24-in centers, there is a gap between them. APC offers optional baying trim (AR7600) to cover the gap between the enclosures. The trim snaps into place without tools and can be installed after the units are joined together and have equipment installed in them.

Note

600-mm and 750-mm enclosures join together without a gap when joined using the inner-most set of holes on the joining brackets.

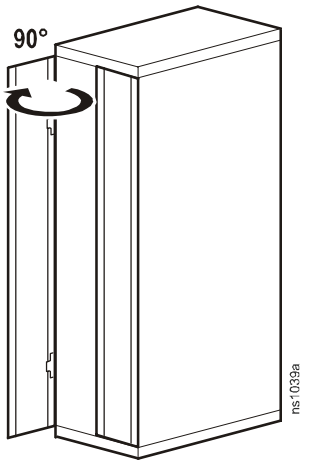
5. Reconnect the grounding wires, and reinstall the doors, if needed.

See “Installing the doors” on page 14.

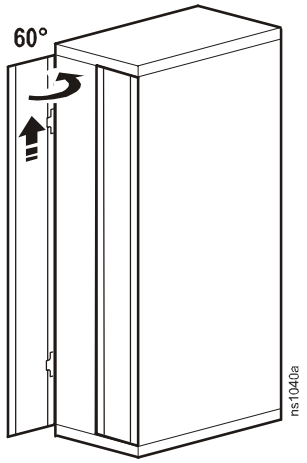
Removing the Doors of Joined Enclosures

If enclosures are joined together, the door removal process is slightly different than on a single enclosure. Follow these steps to remove either a front or rear door from an enclosure that is joined to another enclosure.

1. Open the door you wish to remove to a 90 degree angle. The door will not open any farther than this because of the enclosure next to it.
2. Lift the door upward.



3. As you lift the door, turn it back to 60 degrees from the rack and lift the door off of its hinges to remove it.



Specifications

600-mm, 42-U and 48-U Enclosures

	Measurements	
Item	**AR3100**	**AR3107**
Height	78.40 in (1 991 mm)	88.90 in (2 258 mm)
Width	23.62 in (600 mm)	23.62 in (600 mm)
Depth	42.13 in (1 070 mm)	42.13 in (1 070 mm)
Net weight	275.20 lb (125.09 kg)	304.10 lb (138.23 kg)
Total open area (front door)	919.18 in^2 (593 018.20 mm^2)	1,049.05 in^2 (676 805.10 mm^2)
Total open area (rear door)	1,037.38 in^2 (669 276.10 mm^2)	1,183.64 in^2 (763 637.20 mm^2)
Open area per U (front door)	21.90 in^2 (14 129 mm^2)	21.86 in^2 (14 103.20 mm^2)
Open area per U (rear door)	24.70 in^2 (15 935.45 mm^2)	24.66 in^2 (15 909.65 mm^2)
Percent open (front)	66%	66%
Percent open (rear)	74%	74%
Clearance (for wiring between front door and vertical rail)	2.40 in (60.96 mm)	2.40 in (60.96 mm)
Weight rating: static load†	3,000 lb (1 361 kg)	3,000 lb (1 361 kg)
Weight rating: rolling	2,250 lb (1 021 kg)	2,250 lb (1 021 kg)
Weight rating: shipping‡	1,250 lb (567 kg)	1,250 lb (567 kg)

† Lower the leveling feet if the static weight is over 2,250 lb (1 020.58 kg).

‡ Additional packaging may be required if the rack is being reshipped with equipment installed. See the APC Web site, **www.apc.com,** for details.

750-mm, 42-U and 48-U Enclosures

	Measurements	
Item	**AR3150**	**AR3157**
Height	78.40 in (1 991 mm)	88.90 in (2 258 mm)
Width	29.53 in (750 mm)	29.53 in (750 mm)
Depth	42.13 in (1 070 mm)	42.13 in (1 070 mm)
Net weight	343.10 lbs (155.95 kg)	372 lbs (169.09 kg)
Total open area (front door)	1,222.91 in^2 (788 972.60 mm^2)	1,395.65 in^2 (900 417.60 mm^2)
Total open area (rear door)	1,343.73 in^2 (866 920.80 mm^2)	1,533.33 in^2 (989 243.20 mm^2)
Open area per U (front door)	29.12 in^2 (18 787.06 mm^2)	29.08 in^2 (18 761.25 mm^2)
Open area per U (rear door)	32 in^2 (20 645.12 mm^2)	32 in^2 (20 645.12 mm^2)
Percent open (front)	88%	87%
Percent open (rear)	96%	96%
Clearance (for wiring between front door and vertical rail)	2.40 in (60.96 mm)	2.40 in (60.96 mm)
Weight rating: static load†	3,000 lb (1 361 kg)	3,000 lb (1 361 kg)
Weight rating: rolling	2,250 lb (1 021 kg)	2,250 lb (1 021 kg)
Weight rating: shipping‡	1,250 lb (567 kg)	1,250 lb (567 kg)

† Lower the leveling feet if the static weight is over 2250 lb (1020.58 kg).

‡ Additional packaging may be required if the rack is being reshipped with equipment installed. See the APC Web site, **www.apc.com,** for details.

APC Limited Factory Warranty

The limited warranty provided by American Power Conversion (APC®) in this Statement of Limited Factory Warranty applies only to Products you purchase for your commercial or industrial use in the ordinary course of your business.

Terms of Warranty

American Power Conversion warrants its products to be free from defects in materials and workmanship for a period of five years (two years in Japan) from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its sole discretion, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in any way. Repair or replacement of a defective product or part thereof does not extend the original warranty period. Any parts furnished under this warranty may be new or factory- remanufactured.

Non-transferable Warranty

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